



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/846,076 | 04/30/2001 | Raffi Codilian | K35A0895 | 4541 |

26332 7590 01/30/2004

WESTERN DIGITAL CORP.
20511 LAKE FOREST DRIVE
C205 - INTELLECTUAL PROPERTY DEPARTMENT
LAKE FOREST, CA 92630

| |
|----------|
| EXAMINER |
|----------|

WONG, KIN C

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2651

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,076

Applicant(s)

CODILIAN ET AL.

Examiner

K. Wong

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

Drawings

Drawings filed on 4/30/01 are accepted for examination only. Furthermore, the drawings should be labeled "Prior Art" in view of U.S. Pat. # 661597.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims (1-18) are rejected under the judicially created doctrine of double patenting over claims (1-22) of U. S. Patent No. 6661597 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: a mobile disk drive with restricted read/write to the data zone and/or with obvious variation of wording for the read/write function in the mobile disk drive. See claims 1 and 3 of U.S. Pat. # 6661597 vs. the instant claims 1 and 3.

Art Unit: 2651

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims (1-5, 8-14 and 17-18) are rejected under 35 U.S.C. 102(b) as being anticipated by Ottesen et al (5764430).

Regarding claim 1: Ottesen et al discloses a mobile device (see col. 2, lines 25-57 of Ottesen) comprising a host processor (inherent element in a portable (mobile device) computer) and disk drive, the disk drive having a rotating disk media and a moveable read/write head disposed over the disk media, the disk media being divisible into zones (see figure 3 and col. 6, line 64 to col. 7, line 6 of Ottesen et al) that are radially disposed in discrete areas of the disk media, each zone having a plurality of tracks for storing data, the disk drive including:

a first data storage zone, wherein the mobile device may read data from the first data storage zone when the mobile device is in a mobile environment (in col. 2, line 25 to col. 20; col. 4, line 20 to col. 5, line 53 and col. 6, line 64 to col. 7, line 62 where Ottesen et al discloses that the data zones for reading/writing are based on the

Art Unit: 2651

environment of the drive (i.e., moving or non-moving of the disk drive in the portable computer);

a second data zone, wherein the mobile device may read data from the second data storage zone only when the mobile device is in a non-mobile environment and may not read data from the second data storage zone when the mobile device is in a mobile environment (in col. 11, line 17 to col. 12, line 17 where Ottesen et al describes the read/write access that based on the environmental control conditions (i.e. mobile or non-mobile or portable or stationary) to the desired zone.

Regarding claim 2: the limitations of wherein the mobile device is in a non-mobile environment when the mobile device is place in a docking station and the mobile device is in a mobile environment when the mobile device is not placed in a docking station are considered inherent because Ottesen et al describes a stationary environment (or non-mobile) condition in col. 5, line 17 to col. 6, line 58 which encompasses the non-mobility or docked mobile device.

Regarding claim 3: the limitations of wherein the first data storage zone includes a mobile-normal zone and a docked-safe zone; the second data storage zone includes an ultra-safe zone; the mobile device may write data to ultra-safe zone or to the docked-safe zone only when the mobile device is in a non-mobile environment and not when the mobile device is in a mobile environment; and the mobile device may write data to the mobile-normal zone when the mobile device is in a mobile environment or when the mobile device is in a non-mobile environment are considered inherent because Ottesen

et al discloses the environment conditions that encompassed the noted mobile conditions in col. 11, line 17 to col. 12, line 17.

Regarding claim 4: the limitations of wherein the disk drive prevents the moveable read/write head from dwelling over the ultra-safe zone when the device is in a mobile environment are considered because Ottesen et al describes the environmental conditions that encompasses the noted functions when the read/write head access is restricted to particular zone in col. 11, lines 1-47.

Regarding claim 5: the limitations of wherein the disk drive prevents the moveable read/write head from moving over the ultra-safe zone when the device is in a non-mobile environment are considered inherent because Ottesen et al describes the environmental conditions that encompasses the noted functions when read/write head access is restricted particular zone in col. 11, lines 1-17.

Regarding claim 8: the limitations of wherein the disk drive includes a ramp (ramp is considered inherent because the ramp is typical drive element for parking or locking or latching) for parking an actuator arm couple to the read/write head when the disk drive is in spin-down mode; and the disk drive includes a mobile-low-power zone that is located on ht disk media so that an actuator current is minimized for moving the read/write head to data track in the mobile-low-power zone upon loading of the read/write head over the disk media from the ramp are considered inherent because Ottesen et al describes the similar functions in low power mode in col. 11, lines 1-11.

Regarding claim 9: the limitations of wherein a distance from an outer diameter of the disk media to the mobile-low-power zone is between about 10 and 15 percent of a

Art Unit: 2651

distance between the outer diameter and an inner diameter of the disk media are considered inherent because Ottesen et al describes similar noted functions in col. 14, lines 58 and col. 11, lines 1-11.

Regarding claims 10-14 and 17-18: claims (10-14 and 17-18) have limitations similar to those treated in the above rejections, and are met by the reference as discussed above. Claims (10-14 and 17-18) however also recite the following limitations of disk drive which col. 4, lines 20-33 of Ottesen et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims (6-7 and 15-16) are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al (5764430) in view of Koizumi et al (5982570).

Regarding claims 6-7 and 15-16: the reason for Ottesen et al is stated in above rejections. However, Ottesen et al fails to mention track pitch (or track width) for different zones (and/or disk speed). Koizumi et al relied on for the teachings of different track pitch (or track width) for different zones (and/or disk speed) in col. 11, line 45 to col. 12, line 5 of Koizumi et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the track pitch (or track width) of Ottesen with a variable track pitch (or track width) with respective the disk speed (or zone) as taught by Koizumi

Art Unit: 2651

et al. The rationale is as follows: one ordinary skill in the art would have been motivated to provide a different track pitch width respective to disk speed (or zone) as suggested in col. 11, line 61-67.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Codilian et al (6462896), Codilian et al (6628473) and Codilian (6657811) are cited for mobile device with environmental condition controls.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Wong whose telephone number is (703) 305-7772.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Hudspeth can be reached on (703) 308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

kw



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

24 Jan 04